CLAIMS

1. An inverter transformer which is provided in an inverter circuit to invert DC into AC, and which transforms a voltage inputted at a primary side and outputs the transformed voltage at a secondary side, the inverter transformer comprising a plurality of winding units, each comprising: a bar-shaped magnetic core; and a primary winding and a secondary winding which are wound around the bar-shaped magnetic core, and which have respective leakage inductances, wherein the primary windings are wound around respective magnetic cores in such a manner that a magnetic flux generated in one magnetic core by a current flowing through a primary winding provided around the one magnetic core is directed opposite to a magnetic flux generated in another magnetic core adjacent to the one magnetic core by a current flowing through a primary winding provided around the adjacent magnetic core.

2. An inverter transformer according to Claim 1, wherein at least one portion of each winding unit is covered with respect to a longitudinal direction by a magnetic resin formed of a resin containing a magnetic substance.

3. An inverter transformer according to Claim 2, wherein the magnetic resin covers an entire portion of each winding unit.

4. An inverter transformer according to Claim 2, wherein the magnetic resin covers at least one of: both end portions of each winding unit; and a portion of each winding unit located at a boundary area between the primary and secondary windings.

5. An inverter transformer according to any one of Claims 1 to 4, wherein an external unit having a larger saturation magnetic flux density than the magnetic resin is disposed so as to cover at least one portion of a circumference of a transformer body which comprises the plurality of winding units and the magnetic resin.

6. An inverter transformer according to Claim 5, wherein the external unit has a smaller magnetic resistance than the magnetic resin.

7. An inverter transformer according to Claim 5 or 6, wherein the external unit has one of a squared C configuration and a substantially circular configuration in cross section so as to cover the circumference of the transformer body.

8. An inverter transformer according to Claim 5 or 6, wherein the external unit comprises a plurality of members, and the members are combined into a box configuration so as to cover the transformer body.

9. An inverter transformer according to any one of Claims 5 to 8, wherein the external unit is a sintered compact.

10. An inverter transformer according to any one of Claims 1 to 9, wherein the magnetic resin has a smaller relative magnetic permeability than the bar-shaped magnetic cores.

11. An inverter transformer according to any one of Claims 2 to 10, wherein the magnetic substance contained in the resin is one of Mn-Zn ferrite, Ni-Zn ferrite, and iron powder.